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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/002,008	12/05/2001	Riichiro Ikeda	1560-0374P-SP	2855

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EXAMINER

SPISICH, GEORGE D

ART UNIT	PAPER NUMBER
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3616

DATE MAILED: 08/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/002,008

Applicant(s)

IKEDA, RIICHIRO

Examiner

George D. Spisich

Art Unit

3616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on July 12, 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 6-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11, 16-19 and 22 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 7, 12, 20, 21 and 23 is/are rejected.
- 7) ☒ Claim(s) 3, 6, 8-10 and 13-15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 12, 2004 has been entered.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 20, 21 and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Ryne et al. (USPN 6,389,924).

Ryne et al. disclose an electric power steering apparatus having a steering assist motor (28) for assisting operation of a steering mechanism by turning a steering member and a support mechanism (30, seen best in Figure 2) for supporting the motor on a stationary member and the supporting mechanism has a releasing mechanism, shown as a pin on one side of the supporting mechanism and a hole and slot on the other side of the supporting mechanism, for releasing support of the motor on the stationary member by impact energy applied to the motor. It is understood that any connection, and especially the connection shown in Figure 2 would disconnect under impact.

With respect to claim 20, the steering arrangement of Ryne et al. would be capable of being released from an impact of a vehicle crash.

With respect to claims 21 and 23, the impact energy that is capable of releasing the steering motor of Ryne et al. could be a "linear impact energy" against the motor. There is no structure claimed in claims 21 and 23 that is not present in the arrangement of Ryne et al. and Ryne et al. would have the ability to release the motor with any type of force, whether that force is described as rotational or linear.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 7 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ryne et al. (USPN 6,389,924).

Ryne et al. has been discussed in the prior rejection. However, though Ryne et al. does not show specifically a projection being inserted into a recess to make the connection between the motor and the stationary member, it is obvious that there would be a projection on the motor in opposite orientation to the projection and recess shown on the supporting member in Figure 2 to make the connection between the stationary member and the motor. This projection would be inserted into the recess and the releasing mechanism (the slot arrange with the recess or hole) comprises a movement permitting portion for permitting relative movement of the projection in the recess and a slip-off portion (slot) from where the projection slips off the movement permitting portion.

To have the projection configured as a screw member or any other fastener with a head would have been an obvious expedient so as to facilitate connection.

Furthermore, Ryne et al. shows an electric power steering apparatus having a steering shaft (16) joined to a steering member, a shaft housing (14) for

accommodating the steering shaft, a steering assist motor (28) for assisting operation of a steering mechanism (which would be present in any steering arrangement) joined to the steering shaft. The steering assist motor would have a rotor (as a rotor is an element of any steering motor) and the motor and rotor (from Figure 1) appear to be arranged so that a rotational center thereof intersects an axis of the steering shaft and a cylindrical motor housing for support housing for supporting the rotor. Ryne et al. shows a supporting mechanism (30 or 26) for supporting one end of portion of the motor housing on the shaft housing and the supporting mechanism comprises a projection at a peripheral position of the motor which is understood to exist when considering the connection of the motor and the support mechanism as is shown in Figure 2. There is an arc-shaped groove provided at the shaft housing into which the projection is inserted so as to be movable in a length direction of the groove. Since the supporting mechanism (30) is attached with the shaft housing, it is considered to meet the limitation that "the groove is provided at the shaft housing". Ryne et al. (as also seen in Figure 2) shows that the hole/recess in the supporting mechanism has an abutting groove defining a slip-off portion from where the projection slips off the arc-shaped groove when the projection moves.

The projection could be named as a "tongue" and the recess is configured as an annular groove.

Response to Arguments

With respect to Applicant's argument that the motor would not release due to impact energy and more specifically linear impact energy applied to the motor of Ryne et al. Examiner disagrees with the argument and maintains the rejection. There is no claimed structure that is not present in the arrangement of Ryne et al. and Ryne et al. must only be capable of release connection due to an impact energy and more specifically a linear impact energy. Examiner maintains that the device of Ryne et al. would be capable of releasing upon an impact and more specifically a linear impact.

Allowable Subject Matter

Claims 11, 16-19 and 22 allowed.

Claims 3, 6, 8-10 and 13-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Prior art does not show (claim 3) and elastic member pushing the projection outward to a slip-off portion, or (at least claims 8-10, 13 and 15) an impact energy receiver on the peripheral face of the housing for applying rotational force to the housing by the impact energy.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George D. Spisich whose telephone number is (703) 305-6495. The examiner can normally be reached on Monday to Friday 9:30-7:00 except alternate Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on (703) 308-2089. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Gds
August 5, 2004


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